3.19 Threatened and Endangered Species

3.19.1 Regulatory Setting

The primary federal law protecting threatened and endangered species is the Federal Endangered Species Act (FESA): 16 United States Code (USC), Section 1531, et seq. See also 50 Code of Federal Regulations (CFR) Part 402. This act and later amendments provide for the conservation of endangered and threatened species and the ecosystems upon which they depend. Under Section 7 of this act, federal agencies, such as the Federal Highway Administration (FHWA), are required to consult with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NOAA Fisheries Service) to ensure that they are not undertaking, funding, permitting, or authorizing actions likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. Critical habitat is defined as geographic locations critical to the existence of a threatened or endangered species. The outcome of consultation under Section 7 may include a Biological Opinion with an Incidental Take statement, a Letter of Concurrence and/or documentation of a No Effect finding. Section 3 of FESA defines take as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect or any attempt at such conduct."

California has enacted a similar law at the state level, the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project-caused losses of listed species populations and their essential habitats. The California Department of Fish and Wildlife (CDFW) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFW. For species listed under both the FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, the CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Another federal law, the Magnuson-Stevens Fishery Conservation and Management Act of 1976, was established to conserve and manage fishery resources found off the coast, as well as anadromous species and Continental Shelf fishery resources of the United States, by exercising (A) sovereign rights for the purposes of exploring, exploiting, conserving, and managing all fish within the exclusive economic zone established by Presidential Proclamation 5030, dated March 10, 1983, and (B) exclusive fishery management authority beyond the exclusive economic zone over such anadromous species, Continental Shelf fishery resources, and fishery resources in special areas.

The Project Area is also subject to the requirements of the Orange County Central and Coastal Subregion Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP). The entire footprint of the ETC Corridor was assumed "take" through its construction, and per the NCCP/HCP documents, all development activities and uses addressed by the NCCP/HCP by participating landowners within the NCCP/HCP Plan Areas are considered fully mitigated by the NCCP/HCP. No additional mitigation is required for impacts to identified species and their habitat or for species residing in covered habitats.

As noted in the NCCP/HCP Implementation Agreement and the Final Environmental Impact Report (EIR) and Final Environmental Impact Statement (EIS) for the NCCP/HCP, mitigation for all of the Transportation Corridor Agencies (TCA) Transportation Corridors in the Central and Coastal Subregional Plan area was comprehensive and included $6.615 million in funds and 651 acres (ac) of coastal sage scrub (CSS) revegetation, restoration, and preservation for three transportation corridors, including SR-241. The following components were specifically for the ETC, including the connection with SR-91.

- Contribution of $2,015,000 to the NCCP/HCP Conservation Fund
- Revegetation and restoration of 384 ac
- Maintenance of 25 cowbird traps
- Construction of 5 wildlife undercrossings and 26 wildlife culverts

3.19.2 Affected Environment

This section is based on the *Natural Environment Study* (NES; December 2015), the *Natural Environment Study Errata* (August 2016), the *Supplemental Natural Environment Study* (Supplemental NES; April 2016), the *Supplemental Natural*

Environment Study Errata (August 2016), and the *Biological Assessment* (BA; April 2016) prepared for the Proposed Project.

The Study Area that was assessed for biological resources is referred to as the Biological Study Area (BSA). The description of the BSA was provided earlier in Section 3.15 and was shown on Figure 3.15.1.

A literature review and records search were conducted to identify the existence or potential occurrence of sensitive or special-interest plant and animal species within or in the vicinity of the BSA. The most recent records of the California Natural Diversity Data Base (CNDDB) (Commercial Version) and the California Rare Plant Rank (CRPR; formerly the California Native Plant Society's [CNPS] Electronic Inventory of Rare and Endangered Vascular Plants of California) (2011, 2013, and 2014) were reviewed for the quadrangles containing and surrounding the BSA (i.e., the *Orange, Yorba Linda, Black Star Canyon,* and *Prado Dam, California,* United States Geological Survey 7.5-minute quadrangles). These databases contain records of reported occurrences of federal- and State-listed as threatened, endangered, and proposed threatened or endangered plant species; California Species of Special Concern (SSC); and otherwise special-status plant species or habitat that may occur within or in the immediate vicinity of the BSA. A list of species occurring in the County of Orange was obtained from the USFWS Information, Planning, and Conservation (IPaC) System online database on May 19 and June 15, 2011, September 9, 2013, and December 1, 2014. Official species lists were obtained from the USFWS on January 22, 2014, February 2, 2015, February 11, 2016, and September 16, 2016. The official species lists provide a list of proposed, threatened, or endangered species and sensitive habitats potentially occurring in the vicinity of the Proposed Project. A copy of that letter is provided in Appendix H in the NES.

Reconnaissance-level survey and plant community mapping were conducted on May 10, 2011; March 17, 2015; and March 19, 2015. A full season of focused botanical surveys in the BSA was conducted on May 10 and June 28, 2011. A late season botanical survey was conducted on August 22, 2013, and early season focused botanical surveys were conducted on May 15, 16, 20, and 27, 2014, which completed a full season plant survey. In addition, a botanical survey of the slope area south of SR-91 was conducted on March 17 and 19, 2015. Wildlife surveys included USFWS protocol surveys for coastal California gnatcatcher conducted between April 14 and June 9, 2011.

3.19.2.1 Plant Species

The results of the literature review indicated that a total of 39 special-status plant species have the potential to occur within or in the vicinity of the BSA. Seven of the 39 special-status plant species are federal- and/or State-listed as threatened or endangered species and are discussed in this section. The remaining 32 special-status plant species were discussed earlier in Section 3.17, Plant Species. The federal- and/or State-listed as threatened or endangered plant species within or in the vicinity of the BSA are:

- Braunton's milk-vetch (*Astragalus brauntonii*; federally endangered)
- Gowen cypress (*Hesperocyparis goveniana;* federally endangered)
- Munz's onion (*Allium munzii*; federally endangered/State threatened)
- San Fernando Valley spineflower (*Chorizanthe parryi* var. *fernandina*; State endangered)
- Santa Ana River woollystar (*Eriastrum densifolium* ssp. *sanctorum*; federally endangered/State endangered)
- Slender-horned spineflower (*Dodecahema leptoceras*; federally endangered/State endangered)
- Thread-leaved brodiaea (*Brodiaea filifolia*; federally threatened/State endangered)

None of these threatened or endangered plant species were observed within or in the vicinity of the BSA during the botanical surveys. There is little or no suitable habitat within the BSA for Braunton's milk-vetch (designated critical habitat and known occurrences are adjacent to the BSA), slender-horned spineflower, Santa Ana River woollystar, and Gowen cypress. However, there is Braunton's milk-vetch designated critical habitat adjacent to the BSA, and therefore, it is discussed further below.

Limited or marginally suitable habitat for Munz's onion, thread-leaved brodiaea, and San Fernando Valley spineflower occurs in the BSA. However, botanical surveys conducted during the appropriate blooming periods for these species were negative. There is no designated critical habitat for Munz's onion, thread-leaved brodiaea, or San Fernando Valley spineflower in the BSA. In addition, there are no recent recorded populations of these species in or near the BSA. Therefore, Munz's onion and San Fernando Valley spineflower are considered absent (Biological Assessment findings: No effect) from the BSA and are not discussed further in this section, while thread-leaved brodiaea has at best an unlikely potential within the BSA and is discussed in this section.

Braunton's Milk-vetch Designated Critical Habitat

Braunton's milk-vetch is a perennial herb that occurs in CSS, chaparral, closed-cone coniferous forest, and valley and foothill grassland. It is usually found on granite, limestone, or gravelly clay soils in disturbed areas that range from 13 to 2,100 feet (ft) in elevation. This species is federally listed as endangered.

In December 2006, the USFWS designated critical habitat for Braunton's milk-vetch. There are six critical habitat units totaling approximately 3,300 ac found to be essential to the conservation of this species. The closest critical habitat unit to the project BSA is Unit 6, which is just outside the BSA and outside the direct disturbance limits for the Proposed Project. Unit 6 is south of the City of Yorba Linda in Gypsum and Coal Canyons. It consists of 832 ac, 589 ac of which are in Chino Hills State Park and the Coal Canyon Ecological Reserve, with the remaining acreage on private land. This unit includes several plant locations that are part of a larger population complex. Unit 6 is in a relatively large area that is isolated from urban development and provides genetic connectivity among plants found at several of the locations. It is believed that this unit supports a large seed bank based on a post-fire germination that occurred in 2003. Figure 3.15.2 (Sheets 8 and 9), provided earlier in Section 3.15, shows the location of this designated critical habitat relative to the BSA.

Thread-leaved Brodiaea

Thread-leaved brodiaea is a perennial, bulbiferous herb, which occurs in chaparral openings, CSS, valley and foothill grassland, cismontane woodland, and vernal pools, from approximately 80 to 2,850 ft in elevation. Populations of thread-leaved brodiaea are typically found on flat or gently sloping grassland areas with clay soils, surrounded by shrubland. This species is federally listed as threatened and State-listed as endangered.

Botanical surveys conducted for this species in 2011 during the appropriate blooming period (May–June) and in August 2013 and May 2014 were negative. Critical habitat was designated for thread-leaved brodiaea on February 8, 2011, but there is no designated critical habitat for thread-leaved brodiaea within the BSA. There are no recorded populations of thread-leaved brodiaea in the Project Vicinity. Furthermore, based on focused special-status species survey results conducted for the Mountain Park Project in 2001 and 2003, results were negative for this special-status plant species in the recently added proposed slope grading area outside of the original BSA. Therefore, this species is considered absent or unlikely within the BSA.

3.19.2.2 Animal Species

The results of the literature review indicated that a total of 74 special-status animal species have the potential to occur within or in the vicinity of the BSA. Thirteen are federal- and/or State-listed as threatened or endangered species and are discussed in this section. The remaining 61 special-status animal species were discussed earlier in Section 3.18, Animal Species. The federal- and/or State-listed as threatened or endangered animal species are:

- Arroyo toad (*Anaxyrus californicus*; federally endangered)
- Bald eagle (*Haliaeetus leucocephalus*; State endangered)
- Coastal California gnatcatcher (*Polioptila californica californica*; federally threatened)
- Delhi Sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*; federally endangered)
- Least Bell's vireo (nesting) (*Vireo bellii pusillus*; federally endangered/State endangered)
- Quino checkerspot butterfly (*Euphydryas editha quino*; federally endangered)
- Riverside fairy shrimp (*Streptocephalus woottoni*; federally endangered)
- San Diego fairy shrimp (*Branchinecta sandiegonensis*; federally endangered)
- Santa Ana sucker (*Catostomus santaanae*; federally threatened)
- Southwestern willow flycatcher (nesting) (*Empidonax traillii extimus*; federally endangered/State endangered)
- Swainson's hawk (*Buteo swainsoni*; State threatened)
- Tricolored blackbird (nesting colony) (*Agelaius tricolor*; State emergency endangered)
- Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*; federally threatened/State endangered)

Of these threatened or endangered animal species, only the coastal California gnatcatcher was observed during the field surveys. Marginally suitable foraging habitat for bald eagle and western yellow-billed cuckoo and suitable habitat for coastal California gnatcatcher occur in the BSA. In addition, Santa Ana sucker and coastal California gnatcatcher designated critical habitat were identified in or near the BSA. Suitable nesting habitat for least Bell's vireo and southwestern willow flycatcher is present outside the BSA, in the Project Vicinity. In addition, there is a limited amount of suitable foraging habitat present for least Bell's vireo and

southwestern willow flycatcher in the BSA. These species and designated critical habitat are discussed in more detail below.

Suitable habitat for the San Diego fairy shrimp, Quino checkerspot butterfly, Delhi Sands flower-loving fly, Riverside fairy shrimp, arroyo toad, tricolored blackbird, and Swainson's hawk does not occur in the BSA. Therefore, these species are considered absent from the BSA and are not discussed further in this section.

Santa Ana Sucker

The Santa Ana sucker is federally-listed as threatened. It is endemic to the Los Angeles, San Gabriel, and Santa Ana Rivers. A population on the Santa Clara River may be introduced. It is found in cool, flowing water of small to medium-size permanent streams. The Santa Ana sucker was federally listed in 2000. Critical habitat was first designated by the USFWS in 2005 and revised in 2010. There is no designated critical habitat for the sucker within the BSA, but critical habitat is present along the Santa Ana River to the north of the BSA.

Santa Ana sucker was not observed in the BSA during the 2011, 2013, or 2014 various field surveys, and there is no suitable habitat present for this species in the BSA. However, it was formerly present outside of the BSA in the Santa Ana River to the north and the Prado Basin to the northeast.

Bald Eagle

The bald eagle is State-listed as endangered. It was federally delisted on July 9, 2007. The bald eagle nests in large trees and on platforms. Nests are commonly within 1 mile (mi) of water, and it roosts communally in winter.

The bald eagle was not observed in the BSA during the 2011, 2013, or 2014 surveys, and there is a limited amount of suitable foraging habitat present for this species in the BSA. There is no suitable nesting habitat for the bald eagle in the BSA, but there may be suitable nesting habitat outside the BSA.

Coastal California Gnatcatcher

The coastal California gnatcatcher is a nonmigratory songbird that typically nests and forages in moderately dense stands of CSS below 2,500 ft in elevation in southern California. Gnatcatchers usually defend breeding territories ranging in size from 2 to 14 ac and occupy home ranges that vary in size from 13 to 39 ac. The breeding season of the coastal California gnatcatcher generally extends from February 15 through August 30. After the chicks have fledged, juveniles may remain closely associated

with their parents for up to several months and may disperse up to 6.2 mi from their natal territory.

The coastal California gnatcatcher was listed as threatened by the USFWS in March 1993. On February 7, 2000, approximately 513,650 ac in the Counties of Los Angeles, Orange, Riverside, San Bernardino, and San Diego were designated as critical habitat for the coastal California gnatcatcher. New boundaries of critical habitat totaling 495,795 ac were proposed in April 2003. On December 19, 2007, the USFWS designated 197,303 ac as revised final critical habitat. This revised final rule excludes lands within approved HCP areas, relieving additional regulatory burden on property owners who might be imposed upon by the critical habitat designation. Figure 3.15.1 (Sheets 7 to 10), provided earlier in Section 3.15, shows the location of that designated critical habitat relative to the BSA.

As stated previously, focused surveys were conducted between April 14 and June 9, 2011, to determine the presence of coastal California gnatcatcher in the BSA. Coastal California gnatcatchers were observed during the surveys in two locations. One location consisted of a lone male adjacent to the BSA on the west side of SR-241, approximately 2,000 ft south of the connector on-ramp to SR-91 (shown on Sheet 3 of Figure 3.15.1). The other location, in the median of the SR-241/SR-91 interchange (shown on Sheets 4 and 6 of Figure 3.15.1), consisted of a pair of adults who successfully hatched six young from two nests. Although surveys were concluded before the second nest had fledged, all the young in the first nest fledged successfully. At least one coastal California gnatcatcher was observed in this location during surveys conducted in 2013. Although the age and sex of the coastal California gnatcatchers were not determined at that time, this observation demonstrates the area is an established territory that continues to be used. No coastal California gnatcatchers were detected along SR-91 within or in the vicinity of the BSA.

Coastal California Gnatcatcher Designated Critical Habitat

There is designated coastal California gnatcatcher critical habitat along SR-91 at the east end of the BSA on the north and south sides of SR-91 as shown on Figure 3.15.1 (Sheets 7 to 10). There are two critical habitat areas in the BSA. One area begins approximately 1 mi east of the SR-241/SR-91 interchange and continues east of the BSA with the north part outside the Natural Communities Conservation Plan (NCCP)/HCP Plan Area. The second area overlaps the south side near the east edge of the BSA. A majority of this area is within the NCCP/HCP Plan Area but a small part of the area is within the NCCP/HCP Existing Use Area (less than 1.5 ac).

The CSS in the coastal California gnatcatcher designated critical habitat contains constituent elements and is, therefore, subject to consultation provisions under FESA. In addition to CSS, the chaparral and nonnative grassland vegetation communities also contain constituent elements of coastal California gnatcatcher critical habitat. Although chaparral and nonnative grassland are typically not suitable for nesting coastal California gnatcatcher, they may be used for foraging and dispersal and are, therefore, also subject to consultation provisions under FESA.

Least Bell's Vireo

Least Bell's vireo was listed as an endangered species by State and federal agencies in 1980 and 1986, respectively, and critical habitat was designated in 1994. Least Bell's vireo is a small migratory songbird that nests in Southern California. This species is a summer resident of Southern California and breeds in willow thickets and other dense, low riparian growths in lowlands and lower portions of canyons. Approximately 38,000 ac of critical habitat were designated for least Bell's vireo in 1994. The critical habitat occurs in 10 areas throughout Santa Barbara, Ventura, Los Angeles, San Bernardino, Riverside, and San Diego Counties.

Least Bell's vireo was not observed in the BSA during the various field surveys in 2011, 2013, or 2014, and there is a limited amount of suitable foraging habitat present for this species in the BSA. No suitable nesting habitat is located in the BSA, but is present outside of the BSA in the Santa Ana River to the north and the Prado Basin to the northeast.

Southwestern Willow Flycatcher

Southwestern willow flycatcher is listed as an endangered species by State and federal agencies. This flycatcher is a migratory songbird that typically nests and forages in dense riparian habitats with a patchy understory near surface water or saturated soil. Willow flycatchers usually defend breeding territories ranging in size from 2.7 to 5.7 ac. In Southern California, the breeding season of the southwestern willow flycatcher generally extends from early-May with departures from the territory in mid-August to early-September.

Southwestern willow flycatcher was listed as endangered by the USFWS in 1995. In 1997, southwestern willow flycatcher was USFWS designated critical habitat and re-designated critical habitat in 2005.

Southwestern willow flycatcher was not observed in the BSA during the various field surveys in 2011, 2013, or 2014, and there is a limited amount of suitable foraging

habitat present for this species in the BSA. No suitable nesting habitat is located in the BSA, but is present outside of the BSA in the Santa Ana River to the north and the Prado Basin to the northeast.

Western Yellow-billed Cuckoo

The western yellow-billed cuckoo is listed as endangered by the State and as a threatened species by the USFWS. This cuckoo is a migratory songbird that nests and forages in large, dense riparian habitats in shallow water habitats with cottonwood trees particularly important for foraging. Western yellow-billed cuckoo usually defend very large breeding territories ranging in size from 25 to 99 ac. In Southern California, the breeding season of the western yellow-billed cuckoo generally extends from May through September. The western yellow-billed cuckoo was listed as threatened by the USFWS in October 2014 (Federal Register [FR] 79(192):59992–60038; USFWS 2014b).

Western yellow-billed cuckoo was not observed in the BSA during the various field surveys in 2011, 2013, or 2014, and there is a limited amount of suitable foraging habitat present for this species in the BSA. No suitable nesting habitat is located in the BSA, but is present outside of the BSA in the Santa Ana River to the north and the Prado Basin to the northeast.

3.19.3 Environmental Consequences

3.19.3.1 Temporary Impacts

Build Alternative (Two-Lane Express Lanes Connector) (Preferred Alternative)

Braunton's Milk-vetch Designated Critical Habitat

The disturbance limits of the Build Alternative are adjacent to Braunton's milk-vetch designated critical habitat as shown earlier on Figure 3.15.2 (Sheets 8 and 9). Although the Build Alternative will not directly impact Braunton's milk-vetch designated critical habitat, it may result in temporary indirect impacts during construction through the accumulation of dust on the leaves of any Braunton's milk-vetch plants in the critical habitat. With the implementation of Measure TE-1, described later in this section, which would limit construction activities in proximity to the critical habitat, those potential temporary impacts would not be substantial. This is a determination of "May affect, not likely to adversely affect" on Braunton's milk-vetch and on its designated critical habitat.

Thread-leaved Brodiaea

During construction, chaparral openings, CSS, and grassland vegetation would be disturbed and, therefore, there is a potential to impact thread-leaved brodiaea. In order to minimize impacts to this species, preconstruction surveys would be conducted and an ESA would be established to protect any thread-leaved brodiaea individuals within the construction limits to the extent feasible. Because the presence of the thread-leaved brodiaea within the Project Area is unlikely, and minimization measures would be implemented, the Build Alternative would not substantially impact this species during construction. This is a determination of "May affect, not likely to adversely affect."

Santa Ana Sucker

There is some potential for the aquatic Santa Ana sucker to be indirectly impacted as a result of runoff from the Proposed Project. During construction activities, excavated soil would be exposed, and there would be an increased potential for soil erosion compared to existing conditions. Furthermore, chemicals, liquid products, and petroleum products (e.g., paints, solvents, and fuels), and concrete-related waste may be spilled or leaked during construction and thereby have the potential to be transported via storm runoff into the Santa Ana River. During operation, the Proposed Project would result in an increase in impervious surface area and potentially an increase in total stormwater runoff to the Santa Ana River. This is a determination of "May affect, not likely to adversely affect" on the Santa Ana sucker and its designated critical habitat.

Bald Eagle

The Build Alternative is not expected to directly impact any bald eagles due to the low probability of occurrence in the BSA and the lack of suitable nesting habitat in the BSA for the bald eagle. The Build Alternative may temporarily redirect foraging bald eagles away from the BSA during construction; however, construction activities would be temporary in nature. Furthermore, because of the existing freeways and the presence of higher quality foraging habitat nearby, it is unlikely bald eagles are currently foraging in the BSA or would be during construction. Therefore, the Build Alternative is not anticipated to result in adverse temporary impacts to bald eagles, and no avoidance, minimization, or mitigation measures are required.

Coastal California Gnatcatcher

Direct and indirect temporary impacts to coastal California gnatcatcher and critical habitat are anticipated to occur during construction of the Build Alternative. The

gnatcatcher is likely to occur within or near the disturbance limits at the time of construction because there is a known territory in Coal Canyon approximately 65 ft south of SR-91. Vibratory pile driving at Coal Canyon Undercrossing would occur approximately 300 ft from this location and would generate a maximum noise level of approximately 79 A-weighted decibels (dBA), which would be above the background traffic noise level on SR-91. With implementation of a barrier (temporary construction barrier or a noise curtain surrounding the pile driver) and assuming continuous pile driving for 30 minutes in an hour, noise levels from pile driving would be lower than traffic noise on SR-91. Coastal California gnatcatcher would experience indirect temporary impacts due to construction activities, including increased exposure to noise, vibration, dust, nighttime lighting, and human presence. In addition, direct impacts to coastal California gnatcatcher would occur through habitat disturbance and removal during construction.

Table 3.19.1 shows the direct temporary impacts to California gnatcatcher occupied habitat and designated critical habitat that would occur during construction of the Build Alternative within and outside the NCCP/HCP Plan Area. During construction, take of coastal California gnatcatcher in the NCCP/HCP Plan Area would occur as the result of the temporary loss of 11.85 ac (11.47 ac of CSS and 0.38 ac of nonnative grassland) of occupied habitat in the median of the SR-241/SR-91 interchange as shown in Table 3.19.1.

Take of designated coastal California gnatcatcher-critical habitat in the NCCP/HCP Plan Area, regardless of occupation, would occur as a result of the temporary loss of approximately 12.8 ac of critical habitat, which includes the temporary loss of approximately 0.09 ac on the County-owned parcel south of SR-91 as shown in Table 3.19.1.

Regardless of occupation, take of designated coastal California gnatcatcher habitat outside the NCCP/HCP Plan Area would occur as a result of temporary impacts to 7.96 ac of critical habitat within Caltrans right-of-way as shown in Table 3.19.1.

Temporary indirect impacts to coastal California gnatcatcher during construction would be reduced based on the implementation of Measures NC-1 through NC-6, provided earlier in Section 3.15, which require preconstruction and construction surveys for California gnatcatcher and prohibit construction activities in and adjacent to CSS, and Measures TE-3 through TE-6, provided later in this section, which would

Table 3.19.1 Potential Effects on Coastal California Gnatcatcher Occupied Habitat and Designated Critical Habitat Within and Outside the NCCP/HCP Plan Area[1]

Coastal California Gnatcatcher Habitat[1]		Within the NCCP/HCP Plan Area[4]				Outside the NCCP/HCP Plan Area			
		Within Caltrans Right-of-Way		Outside Caltrans Right-of-Way		Within Caltrans Right-of-Way		Outside Caltrans Right-of-Way	
		Temporary Acres	Permanent Acres	Temporary Acres	Permanent Acres	Temporary Acres	Permanent Acres	Temporary Acres	Permanent Acres
Within 1994 Biological Opinion Impact Area	**Occupied Habitat**								
	Coastal Sage Scrub	11.47	2.61	0.00	0.00	0.00	0.00	0.00	0.00
	Chaparral	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Nonnative Grassland	0.38	0.37	0.00	0.00	0.00	0.00	0.00	0.00
	Total Occupied Habitat	**11.85**	**2.98**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
Outside 1994 Biological Opinion Impact Area	**Designated Critical Habitat[3]**								
	Coastal Sage Scrub	2.60	1.34	0.04	0.39	0.00	0.00	0.00	0.00
	Chaparral	0.076[5]	0.11	0.004[5]	0.17	0.18	0.00	0.00	0.00
	Nonnative Grassland	4.85	0.96	0.00	0.00	0.87	0.00	0.00	0.00
	Oak Woodland[2]	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
	Ruderal[2]	3.12	3.51	0.00	0.00	0.58	0.00	0.00	0.00
	Developed[2]	2.06	13.24	0.00	0.00	6.33	1.18	0.00	0.00
	Total Designated Critical Habitat[2]	**12.71**	**19.16**	**0.09**	**0.56**	**7.96**	**1.18**	**0.00**	**0.00**
Grand Total		**24.56**	**22.14**	**0.09**	**0.56**	**7.96**	**1.18**	**0.00**	**0.00**

[1] This table represents vegetation in the median of SR-241 (within the NCCP/HCP Plan Area) where a CAGN breeding territory was found in 2011 and the designated CAGN critical habitat at the east end of the Project along SR-91.
[2] Oak Woodland, Ruderal, and Developed habitat classifications are also within Designated Critical Habitat, but are not considered suitable for use by CAGN.
[3] CAGN were not found in designated CAGN critical habitat during the 2011 focused surveys, thus the acreage areas are shown under separate headings.
[4] Some of the NCCP/HCP Plan Area also includes the NCCP/HCP Existing Use Area along SR-91 (i.e., temporary impacts to coastal sage scrub include 0.03 ac).
[5] Acreage number is shown to the thousandth place (0.000) and is not a typographical error.

ac = acre/acres
CAGN = California gnatcatcher
Caltrans = California Department of Transportation
NCCP/HCP = Natural Community Conservation Plan/Habitat Conservation Plan
SR-241 = State Route 241
SR-91 = State Route 91

further prohibit and limit construction activities in areas of CSS or coastal California gnatcatcher designated critical habitat.

As a covered project, the NCCP Implementation Agreement specifies take authorization within the right-of-way of SR-241 and SR-91, which includes the known territory location of the coastal California gnatcatcher in the BSA. The NCCP Implementation Agreement specifically states that take authorization for the TCA, as noted in the Biological Opinion (1-6-94-F-17) for the ETC, includes its interchange with SR-91. Incidental take would be permitted for impacts on habitat supporting up to three pairs of California gnatcatcher. Nonetheless, the Build Alternative is expected to go through the Section 7 consultation process among Caltrans, the TCA, and the USFWS to comply with FESA and to ensure consistency with the Implementation Agreement.

As described in Parts I and II of the NCCP Implementation Agreement, all development activities addressed by the NCCP/HCP Plan Area are considered fully mitigated under the NCCP Act, CESA, and FESA for impacts to habitat occupied by listed and other species identified in the Implementation Agreement. Therefore, compensatory mitigation for the impacts of the Build Alternative in the NCCP/HCP Plan Area has already been completed pursuant to the NCCP Implementation Agreement. However, USFWS verification and acceptance of the mitigation components for Project impacts would occur during Section 7 consultation.

Impacts to California gnatcatcher habitat in non-NCCP/HCP Plan Areas within Caltrans right-of-way would be covered through mitigation measures in the Biological Opinion because California gnatcatcher critical habitat was not yet designated and was, therefore, not part of the original Biological Opinion for the ETC. For CSS impacts to coastal California gnatcatcher occupied habitat or designated critical habitat, the proposed minimum mitigation ratio is 1:1 for temporary impacts as described later in Measure TE-7. This mitigation will be evaluated through coordination among Caltrans, TCA, and the USFWS. Specifically, federal Section 7 consultation between Caltrans and the USFWS will be necessary to consider potential adverse impacts to designated coastal California gnatcatcher critical habitat in the BSA.

As of December 2014, TCA had approximately 15 ac of CSS and cactus scrub mitigation land available at their Strawberry Farms habitat restoration area in the City of Irvine. A USFWS-approved habitat restoration plan was prepared for that area.

During email correspondence with the TCA on February 9, 2011 (prior to initiation of the current project), Jonathan Snyder of the USFWS conceptually agreed to the use of the Strawberry Farms area to offset impacts to CSS and cactus scrub associated with future TCA projects.

The Strawberry Farms mitigation area is in the Quail Hill Preserve, part of the Coastal Reserve of the Central and Coastal NCCP/HCP Plan Area, and is contiguous with Bommer and Shady Canyons, adjacent open space land including the Irvine Ranch National Natural Landmark, and a part of the Central and Coastal NCCP/HCP Plan Area. Bommer and Shady Canyons connect with the Laguna Coast Wilderness Park and Crystal Cove State Park. The Strawberry Farms area includes habitat for rare species such as coastal cactus wren and habitat for coastal California gnatcatcher and many-stemmed dudleya (*Dudleya multicaulis*). It is proposed that the Strawberry Farms mitigation area be used as mitigation for the Proposed Project.

This is a determination of "May affect, likely to adversely affect" for the California gnatcatcher and "May affect, not likely to adversely affect" for designated critical habitat for California gnatcatcher.

Least Bell's Vireo

Direct impacts to potential foraging habitat are expected, and there is an incremental probability that the Build Alternative may temporarily redirect foraging least Bell's vireo away from the BSA during construction. To avoid impacts to least Bell's vireos during construction, the monitoring biologist will conduct a preconstruction survey and will flush any individuals prior to brush-clearing and earth-moving activities. With the existence of more suitable habitat in the nearby Santa Ana River and Prado Basin, the temporary loss of potentially suitable foraging habitat would have minimal or no effect on least Bell's vireo.

Indirect project impacts (noise, lighting, and dust) from construction in the freeway median of an already busy facility, and thus very minor increases in temporary noise levels, are not expected to change any potential habitat uses by this species in the vicinity of the BSA. Lighting from advance signage would be minimal, and there would not be spillover to areas outside Caltrans right-of-way. Lighting levels would be consistent with the existing condition.

This is a determination of "May affect, not likely to adversely affect."

Southwestern Willow Flycatcher

Direct impacts to potential foraging habitat are expected, and there is an incremental probability that the Build Alternative may temporarily redirect foraging southwestern willow flycatcher away from the BSA during construction. To avoid impacts to southwestern willow flycatchers during construction, the monitoring biologist will conduct a preconstruction survey and will flush any individuals prior to brush-clearing and earth-moving activities. With the existence of more suitable habitat in the nearby Santa Ana River and Prado Basin, the temporary loss of potentially suitable foraging habitat would have minimal or no effect on southwestern willow flycatcher.

Indirect project impacts (noise, lighting, and dust) from construction in the freeway median of an already busy facility, and thus very minor increases in temporary noise levels, are not expected to change any potential habitat uses by this species in the vicinity of the BSA. This is a determination of "May affect, not likely to adversely affect."

No Build Alternative

The No Build Alternative does not include any improvements to SR-241 or SR-91 in the BSA. Therefore, no temporary impacts to threatened or endangered species would occur as a result of the No Build Alternative.

3.19.3.2 Permanent Impacts

***Build Alternative* (*Two-Lane Express Lanes Connector*) (*Preferred Alternative*)**

Braunton's Milk-vetch Designated Critical Habitat

The Build Alternative would not result in any permanent impacts to Braunton's milk-vetch designated critical habitat, and no avoidance, minimization, or mitigation measures are required. This is a determination of "No effect" on Braunton's milk-vetch, but a determination of "May affect, not likely to adversely affect" on its designated critical habitat.

Thread-leaved Brodiaea

Despite direct permanent impacts to approximately 20 ac of chaparral openings, CSS, and grassland vegetation in the BSA, any potentially suitable habitat impacts are expected to be minimal for this species. Because thread-leaved brodiaea is considered absent or unlikely within the BSA, the Build Alternative is not expected to

substantially impact this species. This is a determination of "May affect, not likely to adversely affect."

Bald Eagle

Operation of the Build Alternative is not expected to directly impact any bald eagles due to the low probability of occurrence in the BSA and the lack of suitable nesting habitat in the BSA for the bald eagle. Because of the existing freeways and the presence of higher quality foraging habitat nearby, it is unlikely bald eagles are currently foraging in the BSA or would be during operation of the Build Alternative. Therefore, the Build Alternative is not anticipated to result in permanent impacts to bald eagles and no avoidance, minimization, or mitigation is required.

Coastal California Gnatcatcher

Direct and indirect permanent impacts to coastal California gnatcatcher and critical habitat would occur as a result of the Build Alternative. The coastal California gnatcatcher would experience indirect permanent impacts as a result of increased exposure to noise, vibration, and dust during operation of the Build Alternative.

Table 3.19.1 shows the direct permanent impacts to coastal California gnatcatcher occupied and designated critical habitat that would occur during operation of the Build Alternative within and outside the NCCP/HCP Plan Area. Take of coastal California gnatcatcher in the NCCP/HCP Plan Area is expected to occur through the permanent loss of 2.98 ac (2.61 ac of CSS and 0.37 ac of nonnative grassland) of occupied habitat in the median of the existing SR-241/SR-91 interchange as shown in Table 3.19.1). Incidental take would be permitted for impacts on habitat supporting up to three pairs of California gnatcatcher.

Take of designated coastal California gnatcatcher designated critical habitat in the NCCP/HCP Plan Area, regardless of occupation, is also expected to occur through the permanent loss of approximately 19.72 ac, which includes permanent loss of approximately 0.56 ac on the County-owned parcel south of SR-91 as shown in Table 3.19.1.

There are 14.83 ac of suitable coastal California gnatcatcher-designated critical habitat in the Project Area. The Proposed Project would permanently impact 2.41 ac of suitable coastal California gnatcatcher designated critical habitat within Caltrans right-of-way (CSS or chaparral, Table 3.19.1). The loss of a few acres of coastal California gnatcatcher designated critical habitat along SR-91 would not adversely affect the survival and recovery of this species since there are thousands of acres of

conserved suitable and occupied gnatcatcher habitat in the vicinity of the Project Area (much of which was never designated as critical because it had already been conserved in the NCCP/HCP before the critical habitat designation was made). Therefore, the Proposed Project impacts would not diminish the value of critical habitat area for the survival and recovery of coastal California gnatcatcher in the surrounding area.

Regardless of occupation, take of coastal California gnatcatcher designated critical habitat outside the NCCP/HCP Plan Area is expected to occur as a result of permanent impacts to 1.18 ac of critical habitat within Caltrans right-of-way as shown in Table 3.19.1.

As discussed earlier, mitigation for the segment of the Build Alternative in the NCCP/HCP Plan Area was conducted as part of the NCCP Implementation Agreement. Therefore, no further mitigation would be required for the permanent impacts to 19.72 ac of designated critical habitat within the NCCP/HCP Plan Area. Impacts to non-NCCP/HCP areas within Caltrans right-of-way will be covered through mitigation measures in the new Biological Opinion because the coastal California gnatcatcher critical habitat was not yet designated and was, therefore, not part of the original Biological Opinion. For impacts to coastal California gnatcatcher occupied habitat, designated critical habitat, and impacts to CSS beyond those that were included in the original Biological Opinion, the proposed minimum mitigation ratio is 2:1 for permanent impacts and 1:1 for temporary impacts as described later in this section in Measure TE-7. It is proposed that the Strawberry Farms mitigation area be used as mitigation for the Proposed Project.

This is a determination of "May affect, likely to adversely affect" for the California gnatcatcher and "May effect, not likely to adversely affect" for designated critical habitat for California gnatcatcher.

Least Bell's Vireo

Direct impacts to this species are expected due to loss of a small amount (approximately 1 ac of chaparral) of potential foraging habitat within the BSA; however, there is a lack of suitable nesting habitat. Indirect project impacts (noise and lighting) from operation of an already busy facility are not expected to substantially change any potential habitat uses by this species in the vicinity of the BSA. For example, the Noise Study Report for the Proposed Project found that noise levels in the Canyon RV Park adjacent to the existing freeway are expected to increase by

1 dBA or less when compared to the No Build Condition. With the existence of more suitable habitat in the nearby Santa Ana River and Prado Basin, the permanent loss of potentially suitable foraging habitat would have a minimal or no permanent effect on least Bell's vireo. This is a determination of "May affect, not likely to adversely affect."

Southwestern Willow Flycatcher

Direct impacts to this species are expected due to loss of a small amount (approximately 1 ac of chaparral) of potential foraging habitat within the BSA; however, there is a lack of suitable nesting habitat. Indirect project impacts (noise and lighting) from operation of an already busy facility are not expected to substantially change any potential habitat uses by this species in the vicinity of the BSA. For example, the Noise Study Report for the Proposed Project found that noise levels in the Canyon RV Park adjacent to the existing freeway are expected to increase by 1 dBA or less when compared to the No Build Condition. With the existence of more suitable habitat in the nearby Santa Ana River and Prado Basin, the permanent loss of potentially suitable foraging habitat would have a minimal or no permanent effect on southwestern willow flycatcher. This is a determination of "May affect, not likely to adversely affect."

3.19.4 Preliminary Effects Determination

Table 3.19.2 shows the federally listed species and any critical habitat associated with the Proposed Project and the preliminary effects determination. The five federally listed species, and their critical habitat (as applicable), which are known from or are in the vicinity of the BSA, are included in the Biological Assessment as part of the Section 7 consultation (i.e., thread-leaved brodiaea, Braunton's milk-vetch, southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher) The effects determination for these species will be finalized later in the USFWS Biological Opinion.

No Build Alternative

The No Build Alternative does not include any improvements to SR-241 or SR-91 in the BSA. Therefore, no permanent impacts to threatened or endangered species would occur as the result of the No Build Alternative.

Table 3.19.2 Preliminary Effects Determination for Federally Listed Species

Listed Species and Critical Habitat[1]	Federal Status	Rational	Effects Determination[2, 3]
Listed Species			
Braunton's milk-vetch *Astragalus brauntonii*	Endangered	No habitat available. Surveys have been negative.	NLAA
Munz's onion *Allium munzii*	Endangered	Limited habitat for this species is present. Surveys have been negative.	No effect
Thread-leaved brodiaea *Brodiaea filifolia*	Threatened	Marginally suitable habitat for this species is present. Surveys have been negative.	NLAA
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	Candidate	Limited habitat for this species is present. Surveys have been negative.	No effect
Slender-horned spineflower *Dodecahema leptoceras*	Endangered	Suitable habitat is absent.	No effect
Santa Ana River woollystar *Eriastrum densifolium ssp. sanctorum*	Endangered	Suitable habitat is absent.	No effect
Gowen cypress *Hesperocyparis goveniana*	Endangered	Suitable habitat is absent.	No effect
Riverside fairy shrimp *Streptocephalus woottoni*	Endangered	Suitable habitat is absent.	No effect
San Diego fairy shrimp *Branchinecta sandiegensis*	Endangered	Suitable habitat is absent.	No effect
Delhi Sands flower-loving fly *Rhaphiomidas terminates abdominalis*	Endangered	Suitable habitat is absent.	No effect
Quino checkerspot butterfly *Euphydryas editha quino*	Endangered	Suitable habitat is absent.	No effect
Santa Ana sucker *Catostomus santaanae*	Threatened	Suitable habitat is absent.	NLAA
Arroyo toad *Anaxyrus californicus*	Endangered	Suitable habitat is absent.	No effect
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Threatened	Suitable habitat is absent.	No effect
Least Bell's vireo *Vireo bellii pusillus*	Endangered	Suitable nesting habitat is absent.	NLAA
Southwestern willow flycatcher *Empidonax traillii extimus*	Endangered	Suitable nesting habitat is absent.	NLAA
Coastal California gnatcatcher *Polioptila californica californica*	Threatened	Suitable nesting habitat is present. Breeding territory.	LAA
Critical Habitat			
Braunton's milk-vetch	Final Designated	One critical habitat polygon occurs on the south side of SR-91 just outside the BSA.	NLAA
Santa Ana sucker	Final Designated	One critical habitat polygon occurs on the north side of SR-91.	NLAA

Table 3.19.2 Preliminary Effects Determination for Federally Listed Species

Listed Species and Critical Habitat[1]	Federal Status	Rational	Effects Determination[2, 3]
Coastal California gnatcatcher	Final Designated	Two critical habitat polygons occur in the BSA along the SR-91.	NLAA

Source: *Natural Environment Study* (December 2015) and *Biological Assessment* (April 2016).

[1] Includes species from the USFWS list of species that may occur in the Project Area (February 2, 2015).

[2] Expected effects determination with implementation of the NCCP/HCP Construction-Related Minimization Measures and other proposed mitigation measures for both NCCP/HCP Plan Areas and non-NCCP/HCP Plan Areas.

[3] Effects Determinations: No effect; May affect; NLAA: Not likely to adversely affect; LAA: May affect, likely to adversely affect.

BSA = Biological Study Area
NCCP/HCP = Natural Community Conservation Plan/Habitat Conservation Plan
SR-91 = State Route 91
USFWS = United States Fish and Wildlife Service

3.19.5 Avoidance, Minimization, and/or Mitigation Measures

The following measure would reduce potential temporary impacts to Braunton's milk-vetch designated critical habitat:

Measure TE-1 **Construction Work Limits Review.** During Final Design, the construction work limits will be reviewed to ensure that the lateral work limits are reduced to avoid designated Braunton's milk-vetch critical habitat and that construction staging areas are located in areas that have been previously disturbed or developed. All designated critical habitat for Braunton's milk-vetch adjacent to and outside the project disturbance limits will be delineated on the project specifications as environmentally sensitive areas (ESAs) prior to any construction activities near those areas.

The following measure would avoid and/or minimize impacts to thread-leaved brodiaea:

Measure TE-2 **Thread-leaved Brodiaea Preconstruction Surveys and Environmentally Sensitive Areas.** Preconstruction surveys will be conducted to determine if thread-leaved brodiaea is present in the Project Area. If this species is found in the Project Area, prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around the protected zone of any thread-leaved brodiaea

individuals and designated as an ESA to be preserved to the extent feasible. The protected zone will extend 5 feet (ft) outside of the vegetation edge. No grading or fill activity of any type will be permitted within the ESA. In addition, no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby thread-leaved brodiaea. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESA. Silt fence barriers will be installed at the ESA boundary to prevent accidental deposition of fill material in areas where thread-leaved brodiaea is adjacent to planned grading activities.

In addition to Measures NC-1 through NC-6 (refer to Section 3.15) that address CSS, Measures WQ-2, WQ-3, and WQ-4 (refer to Section 3.8), and Measure IS-1 (refer to Section 3.20), the following measures would avoid and/or minimize impacts to coastal California gnatcatcher and designated critical habitat:

Measure TE-3 **Coastal California Gnatcatcher Survey.** Prior to the commencement of grading operations or other activities involving disturbance of coastal sage scrub (CSS) or areas of coastal California gnatcatcher designated critical habitat (with constituent elements), a survey will be conducted to locate coastal California gnatcatcher within 100 ft of the outer extent of projected soil disturbance activities and the locations of coastal California gnatcatchers shall be clearly marked and identified on the construction/grading plans. The 100 ft buffer outside the project soil disturbance limits will be clearly marked in the field by construction personnel under the guidance of the biologist. Construction or clearing will not be conducted within the project disturbance limits adjacent to the 100 ft buffer until the biologist determines that the young have fledged or the nest is no longer active.

Measure TE-4 **Barrier Installation.** Prior to clearing or construction, highly visible barriers (such as orange construction fencing) will be installed around CSS and coastal California gnatcatcher designated critical habitat (with constituent elements) adjacent

to and outside the project footprint to designate ESAs. No grading or fill activity of any type will be permitted within the ESAs and no construction activities, materials, or equipment will be allowed within the ESAs. All construction equipment will be operated in a manner so as to prevent accidental damage to nearby ESAs. No structure of any kind, or incidental storage of equipment or supplies, will be allowed within the ESAs. Silt fence barriers will be installed at the ESA boundaries adjacent to the project footprint to prevent accidental deposition of fill material in areas where vegetation is adjacent to planned grading activities.

Measure TE-5 **Construction Activities Monitoring.** A qualified biologist will monitor all construction activities for the duration of the project construction in areas adjacent to ESAs to flush out any wildlife species present from the construction areas prior to construction and to ensure that vegetation removal, best management practices, ESAs, and all avoidance and minimization measures are properly followed.

Measure TE-6 **Shielded Lighting.** Shielded lighting will be used for any nighttime construction adjacent to CSS within coastal California gnatcatcher designated critical habitat to avoid and minimize artificial night lighting effects on the gnatcatcher.

The following measure would mitigate for temporary and permanent impacts to coastal California gnatcatcher occupied habitat and designated critical habitat outside of the NCCP/HCP Plan Area.

Measure TE-7 **Section 7 Consultation.** Prior to construction, Section 7 consultation with the United States Fish and Wildlife Service (USFWS) will be conducted to address effects to coastal California gnatcatcher and coastal California gnatcatcher occupied and/or critical habitat outside the Natural Communities Conservation Plan (NCCP) Area. Impacts to CSS in coastal California gnatcatcher occupied habitat or designated critical habitat outside the NCCP Area will be mitigated at a minimum mitigation ratio of 2:1 for permanent impacts and 1:1

for temporary impacts. The final mitigation ratio will be determined through coordination among Caltrans, the Foothill/Eastern Transportation Corridor Agency (F/ETCA), and the USFWS, and the federal Section 7 consultation between Caltrans and the USFWS. A new formal Section 7 consultation is needed for the following reasons:

a. To request concurrence with "May affect, not likely to adversely affect" determinations for Braunton's milk-vetch, thread-leaved broadiaea, Santa Ana sucker, least Bell's vireo, and southwestern willow flycatcher.
b. To request concurrence with a "May affect, likely to adversely affect" determination for the coastal California gnatcatcher.
c. To verify the proposed impacts to and mitigation for occupied CSS, not occupied CSS, and designated coastal California gnatcatcher critical habitat covered and mitigated under the NCCP/HCP agreement and the Eastern Transportation Corridor (ETC) Biological Opinion (1-6-94-F-17).
d. To verify that the proposed incidental take number of coastal California gnatcatcher (habitat supporting up to three pairs) will be within or exceed the amount of take specified in the incidental take statement included in the ETC Biological Opinion (1-6-94-F-17).
e. To request concurrence with "May affect, not likely to adversely affect" determinations for Braunton's milk-vetch, Santa Ana sucker, and coastal California gnatcatcher critical habitat outside NCCP/Habitat Conservation Plan (HCP) covered areas.

The following measure will be incorporated to avoid and minimize impacts to least Bell's vireo and southwestern willow flycatcher.

Measure TE-8 **Foraging Special-Status Riparian Birds.** Prior to vegetation clearing or construction within the species foraging habitat areas during the migration and nesting periods (generally mid-March through August), a qualified biologist will conduct a

preconstruction survey to identify the locations of any special-status riparian birds. If foraging individuals are found within the vegetation clearing area during the breeding season, clearing will be delayed until the species is absent. Per the NCCP/HCP construction minimization measures, outside the breeding season, the monitoring biologist will flush NCCP/HCP identified species from the area, prior to brush-clearing and earth-moving activities.

Measure NC-16 for CSS habitat, discussed in Section 3.15, Natural Communities, is also applicable to Braunton's milk-vetch and its critical habitat.

ETC Final EIR and Final EIS

In addition to ETC Final EIR and Final EIS Measure B-25 in Section 3.15, Natural Communities, the following measure for impacts to Coastal California gnatcatcher from the ETC Final EIR and Final EIS is applicable to the Build Alternative:

Measure B-27 *Grading and construction activities shall be redirected temporarily around any nesting sites for a distance of 500 ft for candidate and listed species of birds and at a distance of 1,000 ft for raptors during nesting and breeding seasons. ~~In the event that a coyote, bobcat, or mountain lion den is located, grading and construction operations shall be redirected around the den for a distance of 1,000 ft.~~ The nesting sites ~~and dens~~ should be resurveyed toward the end of the breeding seasons of these species to verify completion of the breeding cycle. Nests ~~and dens~~ that will be removed ~~due to ETC~~ must be removed during the nonbreeding season only.*

The ETC Final EIR and Final EIS Measures B-8 and B-11 for CSS habitat, discussed in Section 3.15, Natural Communities, are also applicable to Braunton's milk-vetch and its critical habitat.

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